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The Art of Happiness: An Explorative Study of a Contemplative Program for Subjective Well-Being

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In recent decades, psychological research on the effects of mindfulness-based interventions has greatly developed and demonstrated a range of beneficial outcomes in a variety of populations and contexts. Yet, the question of how to foster subjective well-being and happiness remains open. Here, we assessed the effectiveness of an integrated mental training program *The Art of Happiness* on psychological well-being in a general population. The mental training program was designed to help practitioners develop new ways to nurture their own happiness. This was achieved by seven modules aimed at cultivating positive cognition strategies and behaviors using both formal (i.e., lectures, meditations) and informal practices (i.e., open discussions). The program was conducted over a period of 9 months, also comprising two retreats, one in the middle and one at the end of the course. By using a set of established psychometric tools, we assessed the effects of such a mental training program on several psychological well-being dimensions, taking into account both the longitudinal effects of the course and the short-term effects arising from the intensive retreat experiences. The results showed that several psychological well-being measures gradually increased within participants from the beginning to the end of the course. This was especially true for life satisfaction, self-awareness, and emotional regulation, highlighting both short-term and longitudinal effects of the program. In conclusion, these findings suggest the potential of the mental training program, such as *The Art of Happiness*, for psychological well-being.

Keywords: meditation, wisdom, happiness, well–being, mindfulness

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INTRODUCTION

People desire many valuable things in their life, but—more than anything else—they want happiness (Diener, 2000). The sense of happiness has been conceptualized as people's experienced well-being in both thoughts and feelings (Diener, 2000; Kahneman and Krueger, 2006). Indeed, research on well-being suggests that the resources valued by society, such as mental health (Koivumaa-Honkanen et al., 2004) and a long life (Danner et al., 2001), associate with high happiness levels. Since the earliest studies, subjective well-being has been defined as the way in which individuals experience the quality of their life in three different but interrelated mental aspects: infrequent negative affect, frequent positive affect, and cognitive evaluations of life

satisfaction in various domains (physical health, relationships, and work) (Diener, 1984, 1994, 2000; Argyle et al., 1999; Diener et al., 1999; Lyubomksky et al., 2005; Pressman and Cohen, 2005). A growing body of research has been carried out aimed at identifying the factors that affect happiness, operationalized as subjective well-being. In particular, the construct of happiness is mainly studied within the research fields of positive psychology or contemplative practices, which are grounded in ancient wisdom traditions. Positive psychology has been defined as the "the scientific study of human strengths and virtues" (Sheldon and King, 2001), and it can be traced back to the reflections of Aristotle about different perspectives on well-being (Ryan and Deci, 2001). On the other end, contemplative practices include a great variety of mental exercises, such as mindfulness, which has been conceived as a form of awareness that emerges from experiencing the present moment without judging those experiences (Kabat-Zinn, 2003; Bishop et al., 2004). Most of these exercises stem from different Buddhist contemplative traditions such as Vipassana and Mahayana (Kornfield, 2012). Notably, both perspective share the idea of overcoming suffering and achieving happiness (Seligman, 2002). Particularly, Buddhism supports "the cultivation of happiness, genuine inner transformation, deliberately selecting and focusing on positive mental states" (Lama and Cutler, 2008). In addition, mindfulness has been shown to be positively related to happiness (Shultz and Ryan, 2015), contributing to eudemonic and hedonic well-being (Howell et al., 2011).

In fact, although the definition of happiness has a long history and goes back to philosophical arguments and the search for practical wisdom, in modern times, happiness has been equated with hedonism. It relies on the achievement of immediate pleasure, on the absence of negative affect, and on a high degree of satisfaction with one's life (Argyle et al., 1999). Nonetheless, scholars now argue that authentic subjective well-being goes beyond this limited view and support an interpretation of happiness as a eudemonic endeavor (Ryff, 1989; Keyes, 2006; Seligman, 2011; Hone et al., 2014). Within this view, individuals seem to focus more on optimal psychological functioning, living a deeply satisfying life and actualizing their own potential, personal growth, and a sense of autonomy (Deci and Ryan, 2008; Ryff, 2013; Vazquez and Hervas, 2013; Ivtzan et al., 2016). In psychology, such a view finds one of its primary supports in Maslow's (1981) theory of human motivation. Maslow argued that experience of a higher degree of satisfaction derives from a more wholesome life conduct. In Maslow's hierarchy of needs theory, once lower and more localized needs are satisfied, the unlimited gratification of needs at the highest level brings people to a full and deep experience of happiness (Inglehart et al., 2008). Consequently, today, several scholars argue that high levels of subjective well-being depend on a multi-dimensional perspective, which encompasses both hedonic and eudemonic components (Huta and Ryan, 2010; Ryff and Boylan, 2016). Under a wider perspective, the process of developing well-being reflects the notion that mental health and good functioning are more than a lack of illness (Keyes, 2005). This approach is especially evident if we consider that even the definition of mental health has been re-defined by the World Health Organization (1948), which conceives health not merely as the absence of illness, but as a whole state of biological, psychological, and social well-being.

To date, evidence exists suggesting that happiness is, in some extent, modulable and trainable. Thus, simple cognitive and behavioral strategies that individuals choose in their lives could enhance happiness (Lyubomirsky et al., 2005; Sin and Lyubomirsky, 2009). In the history of psychology, a multitude of clinical treatments have been applied to minimize the symptoms of a variety of conditions that might hamper people from being happy, such as anger, anxiety, and depression (for instance, see Forman et al., 2007; Spinhoven et al., 2017). In parallel with this view, an alternative—and less developed—perspective found in psychology focuses on the scientific study of individual experiences and positive traits, not for clinical ends, but instead for personal well-being and flourishing (e.g., Fredrickson and Losada, 2005; Sin and Lyubomirsky, 2009). Yet, the question of exactly how to foster subjective well-being and happiness, given its complexity and importance, remains open to research. Answering this question is of course of pivotal importance, both individually and at the societal level. Positive Psychology Interventions encompass simple, self-administered cognitive behavioral strategies intended to reflect the beliefs and behaviors of individuals and, in response to that, to increase the happiness of the people practicing them (Sin and Lyubomirsky, 2009; Hone et al., 2015). Specifically, a series of comprehensive psychological programs to boost happiness exist, such as Fordyce's program (Fordyce, 1977), Well-Being Therapy (Fava, 1999), and Quality of Life Therapy (Frisch, 2006). Similarly, a variety of meditation-based programs aim to develop mindfulness and emotional regulatory skills (Carmody and Baer, 2008; Fredrickson et al., 2008; Weytens et al., 2014), such as Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 1990) and Mindfulness-Based Cognitive Therapy (MBCT; Teasdale et al., 2000). Far from being a mere trend (De Pisapia and Grecucci, 2017), those mindfulness-based interventions have been shown to lead to increased well-being (Baer et al., 2006; Keng et al., 2011; Choi et al., 2012; Coo and Salanova, 2018; Lambert et al., 2019) in several domains, such as cognition, consciousness, self, and affective processing (Raffone and Srinivasan, 2017). Typically, mindfulness programs consist of informal and formal practice that educate attention and develop one's capacity to respond to unpredicted and/or negative thoughts and experiences (Segal and Teasdale, 2002). In this context, individuals are gradually introduced to meditation practices, focusing first on the body and their own breath, and later on thoughts and mental states. The effects of these programs encompass positive emotions and reappraisal (Fredrickson et al., 2008; Grecucci et al., 2015; Calabrese and Raffone, 2017) and satisfaction in life (Fredrickson et al., 2008; Kong et al., 2014) and are related to a reduction of emotional reactivity to negative affect, stress (Arch and Craske, 2006; Jha et al., 2017), and aggressive behavior (Fix and Fix, 2013). All these effects mediate the relationship between meditation frequency and happiness (Campos et al., 2016). This allows positive psychology interventions to improve subjective well-being and happiness and also reduce depressive symptoms and negative affect along with other psychopathologies (Seligman, 2002; Quoidbach et al., 2015). Engaging in mindfulness might

enhance in participants the awareness of what is valuable to them (Shultz and Ryan, 2015). This aspect has been related to the growth of self-efficacy and autonomous functioning and is attributable to an enhancement in eudemonic well-being (Deci and Ryan, 1980). Moreover, being aware of the present moment provides a clearer vision of the existing experience, which in turn has been associated with increases in hedonic well-being (Coo and Salanova, 2018). Following these approaches, recent research provides evidence that trainings that encompass both hedonic and eudemonic well-being are correlated with tangible improved health outcomes (Sin and Lyubomirsky, 2009).

Although there is a consistent interest in scientific research on the general topic of happiness, such studies present several limitations. Firstly, most of the research has focused on clinical studies to assess the effectiveness of happiness-based interventions—in line with more traditional psychological research, which is primarily concerned with the study of mental disorders (Garland et al., 2015, 2017; Groves, 2016). Secondly, most of the existing interventions are narrowly focused on the observation of single dimensions (i.e., expressing gratitude or developing emotional regulation skills) (Boehm et al., 2011; Weytens et al., 2014). Moreover, typically studies involve brief 1- to 2-week interventions (Gander et al., 2016), in contrast with the view that eudemonia is related to deep and long-lasting aspects of one's personal lifestyle. Furthermore, while the effectiveness of mindfulness-based therapies is well-documented, research that investigates the effects of mindfulness retreats has been lacking, which are characterized by the involvement of more intense practice from days to even years [for meta-analysis and review, see Khoury et al. (2017), McClintock et al. (2019), Howarth et al. (2019)].

In this article, we report the effects on subjective well-being of an integrated mental training program called *The Art of Happiness*, which was developed and taught by two of the authors (CM for the core course subject matter and NDP for the scientific presentations). The course lasted 9 months and included three different modules (see Methods and **Supplementary Material** for all details), namely, seven weekends (from Friday evening to Sunday afternoon) dedicated to a wide range of specific topics, two 5-day long retreats, and several free activities at home during the entire period. The course was designed to help practitioners develop new ways to nurture their own happiness, cultivating both self-awareness and their openness to others, thereby fostering their own emotional and social well-being. The basic idea was to let students discover how the union of ancient wisdom and spiritual practices with scientific discoveries from current neuropsychological research can be applied beneficially to their daily lives. This approach and mental training program was inspired by a book of the Fourteenth Dalai Lama Tenzin Gyatso and the psychiatrist Lama and Cutler (2008). The program rests on the principle that happiness is inextricably linked to the development of inner equilibrium, a kinder and more open perspective of self, others, and the world, with a key role given to several types of meditation practices. Additionally, happiness is viewed as linked to a conceptual understanding of the human mind and brain, as well as their limitations and potentiality, in the light of the most recent scientific discoveries. To this end, several scientific topics and discoveries from neuropsychology were addressed in the program, with a particular focus on cognitive, affective, and social neuroscience. Topics were taught and discussed with language suitable for the general public, in line with several recent books (e.g., Hanson and Mendius, 2011; Dorjee, 2013; Goleman and Davidson, 2017). The aim of this study was to examine how several psychological measures, related to psychological well-being, changed among participants in parallel with course attendance and meditation practices. Given the abovementioned results of the positive effects on well-being (Baer et al., 2006; Fredrickson et al., 2008; Keng et al., 2011; Choi et al., 2012; Kong et al., 2014; Coo and Salanova, 2018; Lambert et al., 2019), we predicted to find a significant increase in the dimensions of life satisfaction, control of anger, and mindfulness abilities. Conversely, we expected to observe a reduction of negative emotions and mental states (Arch and Craske, 2006; Fix and Fix, 2013; Jha et al., 2017)—i.e., stress, anxiety and anger. Moreover, our aim was to explore how those measures changed during the course of the mental training program, considering not only the general effects of the course (longitudinal effects) but also specific effects within each retreat (short-term effects). Our expectation for this study was therefore that the retreats would have had an effect on the psychological dimensions of well-being linked to the emotional *states* of our participants, while the whole course would have had a greater effect on the *traits* related to well-being. The conceptual distinction between states and traits was initially introduced in regard to anxiety by Cattell and Scheier (1961), and then subsequently further elaborated by Spielberger et al. (1983). When considering a mental construct (e.g., anxiety or anger), we refer to trait as a relatively stable feature, a general behavioral attitude, which reflects the way in which a person tends to perceive stimuli and environmental situations in the long term (Spielberger et al., 1983; Spielberger, 2010). For example, subjects with high trait anxiety have indeed anxiety as a habitual way of responding to stimuli and situations. The state, on the other hand, can be defined as a temporary phase within the emotional continuum, which, for example, in anxiety is expressed through a subjective sensation of tension, apprehension, and nervousness, and is associated with activation of the autonomic nervous system in the short term (Spielberger et al., 1983; Saviola et al., 2020). Here, in the adopted tests and analyses, we keep the two time scales separated, and we investigate the results with the aim of understanding the effects of the program on states and traits of different emotional and well-being measures. As a first effect of the course, we expect that the retreats affect mostly psychological states (as measured in the comparison of psychological variables between start and end of each retreat), whereas the full course is predicted to affect mainly psychological traits (as measured in the comparison of the psychological variables between start, middle, and end of the entire 9-month period).

MATERIALS AND METHODS

Participants

The participants in the mental training program and in the related research were recruited from the Institute Lama Tzong

Khapa (Pomaia, Italy) in a 9-month longitudinal study (seven modules and two retreats) on the effects of a program called *The Art of Happiness* (see **Supplementary Material** for full details of the program). Twenty-nine participants followed the entire program (there were nine dropouts after the first module). Their mean age was 52.86 years (range = 39–66; SD = 7.61); 72% were female. Participants described themselves as Caucasian, reaching a medium-high scholarly level with 59% of the participants holding an academic degree and 41% holding a high school degree. The participants were not randomly selected, as they were volunteers in the program. Most of them had no serious prior experience of meditation, only basic experience consisting of personal readings or watching video courses on the web, which overall we considered of no impact to the study. The only exclusion criteria were absence of a history of psychiatric or neurological disease, and not being currently on psychoactive medications. The study was approved by the Ethics Committee of the Sapienza University of Rome, and all participants gave written informed consent. The participants did not receive any compensation for participation in the study.

Design

The overall effectiveness of the 9-month training was examined using a within-subjects design, with perceived stress, mindfulness abilities, etc. (Time: pre–mid–end) as the dependent variable. The effectiveness of the retreats was examined using a 2 × 2 factor within-subjects design (condition: pre vs. post; retreat: 1 vs. 2), with the same dependent variables. The specific contemplative techniques that were applied in the program are described in the **Supplementary Material**, the procedure is described in the *Procedure* section, and the measurements are described in the *Materials* section.

Mental Training Program

The program was developed and offered at the Institute Lama Tzong Khapa (Pomaia, Italy). It was one of several courses that are part of the Institute's ongoing programs under the umbrella of "Secular Ethics and Universal Values." These various programs provide participants with opportunities to discover how the interaction of ancient wisdom and spiritual practices with contemporary knowledge from current scientific research in neuropsychology can be applied extensively and beneficially to improve the quality of their daily lives.

Specifically, *The Art of Happiness* was a 9-month program, with one program activity each month, either a weekend module or a retreat; there were two retreats—a mid-course retreat and a concluding retreat (for full details on the program, see **Supplementary Material**). Each thematic module provided an opportunity to sequentially explore the topics presented in the core course text, *The Art of Happiness* by the Lama and Cutler (2008).

In terms of the content of this program, as mentioned above, the material presented and explored has been drawn on the one hand from the teachings of Mahayana Buddhism and Western contemplative traditions, and current scientific research found in neuropsychology on the other hand. On the scientific side, topics included the effects of mental training and meditation, the psychology and neuroscience of well-being and happiness, neuroplasticity, mind–brain–body interactions, different areas of contemplative sciences, the placebo effects, the brain circuits of attention and mind wandering, stress and anxiety, pain and pleasure, positive and negative emotions, desire and addiction, the sense of self, empathy, and compassion (for a full list of the scientific topics, see **Supplementary Material**).

The overall approach of the course was one of non-dogmatic exploration. Topics were presented not as undisputed truths, but instead as information to be shared, explored, examined, and possibly verified by one's own experience. Participants were heartily invited to doubt, explore, and test everything that was shared with them, to examine and experience firsthand whether what was being offered has validity or not.

The course was, essentially, an informed and gentle training of the mind, and in particular of emotions, based on the principle that individual well-being is inextricably linked to the development of inner human virtues and strengths, such as emotional balance, inner self-awareness, an open and caring attitude toward self and others, and clarity of mind that can foster a deeper understanding of one's own and others' reality.

The program provided lectures and discussions, readings, and expert videos introducing the material pertinent to each module's topic. Participants engaged with the material through listening, reading, discussing, and questioning. Participants were provided with additional learning opportunities to investigate each topic more deeply, critically, and personally, through the media of meditation, journaling, application to daily life, exercises at home, and contemplative group work with other participants in dyads and triads. Participants were then encouraged to reflect repeatedly on their insights and on their experiences, both successful and not, to apply their newly acquired understandings to their lives, by incorporating a daily reflection practice into their life schedule. The two program retreats also provided intensive contemplative experiences and activities, both individual and in dialogue with others.

On this basis, month after month in different dedicated modules, participants learned new ways to nurture their own happiness, to cultivate their openness to others, to develop their own emotional and social well-being, and to understand some of the scientific discoveries on these topics.

The specific topics addressed in corresponding modules and retreats, each in a different and consecutive month, were as follows: (1) The Purpose of Life: Authentic Happiness; (2) Empathy and Compassion; (3) Transforming Life's Suffering; (4) Working with Disturbing Emotions I: Hate and Anger; first retreat (intermediate); (5) Working with Disturbing Emotions II: The Self Image; (6) Life and Death; (7) Cultivating the Spiritual Dimension of Life: A Meaningful Life; second retreat (final). Full details of the entire program are reported in the **Supplementary Material**.

Participants were guided in the theory and practice of various contemplative exercises throughout the course pertaining to all the different themes. Recorded versions of all the various meditation exercises were made available to participants, enabling them to repeat these practices at home at their own pace.

Participants were encouraged to enter the program already having gained some basic experience of meditation, but this was not a strict requirement. In fact, not all participants in this experiment actually fulfilled this (only five), although each of the other participants had previous basic experiences of meditation (through personal readings, other video courses, etc.). In spite of this variety, by the end of the 9-month program, all participants were comfortable with contemplative practices in general and more specifically with the idea of maintaining a meditation practice in their daily lives.

During the various Art of Happiness modules, a variety of basic attentional and mindful awareness meditations were practiced in order to enhance attentional skills and cultivate various levels of cognitive, emotional, social, and environmental awareness.

Analytical and reflective contemplations are a form of deconstructive meditation (Dahl et al., 2015), which were applied during the course in different contexts. On the one hand, these types of meditations were applied in the context of heart-opening practices—for example, in the cultivation of gratitude, forgiveness, loving-kindness toward self and others, self-compassion, and compassion for others. Analytical and reflective meditations were also practiced as a learning tool for further familiarization with some of the more philosophical subject matter of the course—engaging in a contemplative analysis of impermanence (for example, contemplating more deeply and personally the transitory nature of one's own body, of one's own emotions and thoughts, as well as of the material phenomena that surround us). These analytical meditations were also accompanied by moments of concentration (sustained attention) at the conclusion of each meditation focusing on what the meditator has learned or understood in the meditative process, in order to stabilize and reinforce those insights more deeply within the individual.

Additional contemplative activities were also included in the program: contemplative art activities, mindful listening, mindful dialogue, and the practice of keeping silence during the retreat. Participants were, in addition, encouraged to keep a journal of their experiences during their Art of Happiness journey, especially in relation to their meditations and the insights and questions that emerged within themselves, in order to enhance their self-awareness and cultivate a deeper understanding of themselves, their inner life and well-being, and their own inner development during the course and afterward.

During the two retreats, the previous topics were explored again (modules 1–4 for the intermediary retreat and modules 5–7 for the final retreat), but without discussing the theoretical aspects (i.e., the neuroscientific and psychological theories), instead only focusing on the contemplative practices, which were practiced extensively for the whole day, both individually and in group activities (for a full list of the contemplative practices and retreat activities, see **Supplementary Material**).

Procedure

We collected data at five-time points, always during the first day (either of the module or the retreat): at baseline (month 1 - T0), at pre (T1) and post (P1) of the mid-course retreat (month 5–Retreat 1), and at pre (T2) and post (R2) of the final retreat (month 9–Retreat 2), as shown in **Figure 1**. Participants filled out the questionnaires on paper all together within the rooms of the Institute Lama Tzong Khapa at the beginning of each module or retreat, and at the end of the retreats, with the presence of two researchers. The order of the questionnaires was randomized, per person and each questionnaire session lasted less than an hour.

Materials

The adopted questionnaires were those commonly used in the literature to measure a variety of traits and states linked to well-being. An exhaustive description of the self-reported measures follows below.

Satisfaction With Life Scale (SWLS)

The SWLS (Diener et al., 1985) was developed to represent cognitive judgments of life satisfaction. Participants indicated their agreement in five items with a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Scores range from 5 to 35, with higher scores representing higher levels of satisfaction. Internal consistency is very good with Cronbach's $\alpha = 0.85$ [Italian version of the normative data in Di Fabio and Palazzeschi (2012)].

Short Version of the Perceived Stress Scale (PSS-10)

The PSS (Cohen et al., 1983) was designed to assess individual perception and reaction to stressful daily-life situations. The questionnaire consists of 10 questions related to the feelings and thoughts of the last month, with a value ranging from 0 (never) to 4 (very often) depending on the severity of the disturbance caused. Scores range from 0 to 40. Higher scores represent higher levels of perceived stress, reflecting the degree to which respondents find their lives unpredictable or overloaded. Cronbach's α ranges from 0.78 to 0.93 [Italian version of the normative data by Mondo et al. (2019)].

State-Trait Anxiety Inventory (STAI)

The STAI (Spielberger et al., 1983) was developed to assess anxiety. It has 40 items, on which respondents evaluate themselves in terms of frequency with a four-point Likert scale ranging from 1 (almost never) to 4 (almost always). The items are grouped in two independent subscales of 20 items each that assess state anxiety, with questions regarding the respondents' feelings at the time of administration, and trait anxiety, with questions that explore how the participant feels habitually. The scores range from 20 to 80. Higher scores reflect higher levels of anxiety. Internal consistency coefficients for the scale ranged from 0.86 to 0.95 [Italian version of the normative data by Spielberger et al. (2012)].

Positive and Negative Affect Schedule (PANAS)

PANAS (Watson et al., 1988) measures two distinct and independent dimensions: positive and negative affect. The questionnaire consists of 20 adjectives, 10 for the positive affect subscale and 10 for the negative affect scale. The positive affect

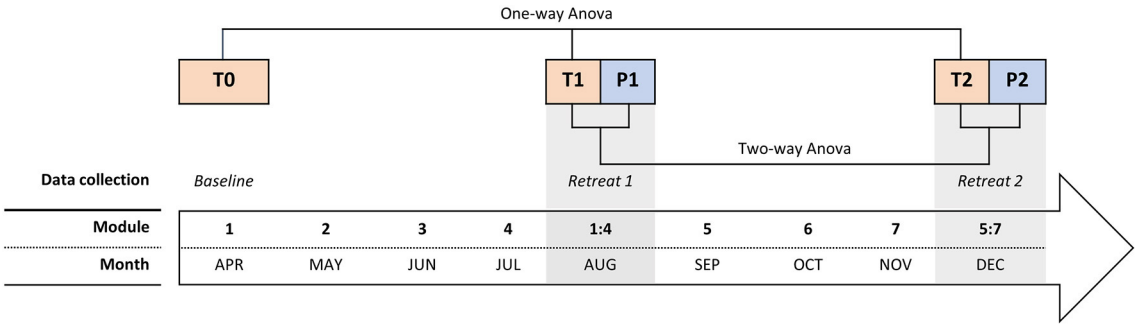

FIGURE 1 | The timing of the course and the experimental procedure, including the modules, the retreats, and the 5 data collections (from T0 to P2).

subscale reflects the degree to which a person feels enthusiastic, active, and determined while the negative affect subscale refers to some unpleasant general states such as anger, guilt, and fear. The test presents a five-point Likert scale (1 = very slightly or not at all; 5 = extremely). The alpha reliabilities are acceptably high, ranging from 0.86 to 0.90 for positive affect and from 0.84 to 0.87 for negative affect [Italian version of the normative data by Terracciano et al. (2003)].

Five Facet Mindfulness Questionnaire (FFMQ)

The FFMQ (Baer et al., 2008) was developed to assess mindfulness facets through 39 items rated on a five-point Likert scale, ranging from 1 (never or very rarely true) to 5 (very often or always true). A total of five subscales are included: attention and observation of one's own thoughts, feelings, perceptions, and emotions (*Observe*); the ability to describe thoughts in words, feelings, perceptions, and emotions (*Describe*); act with awareness, with attention focused and sustained on a task or situation, without mind wandering (*Act-aware*); non-judgmental attitude toward the inner experience (*Non-Judge*); and the tendency to not react and not to reject inner experience (*Non-React*). Normative data of the FFMQ have demonstrated good internal consistency, with Cronbach's α ranging from 0.79 to 0.87 [Italian version by Giovannini et al. (2014)].

State-Trait Anger Expression Inventory-2 (STAXI-2)

The STAXI-2 (Spielberger, 1999) provides measures to assess the experience, expression, and control of anger. It comprises 57 items rated on a four-point Likert scale, ranging from 0 (not at all) to 3 (very much indeed). Items are grouped by four scales: the first, State Anger scale, refers to the emotional state characterized by subjective feelings and relies on three more subscales: Angry Feelings, Physical Expression of Anger, and Verbal Expression of Anger. The second scale is the Trait Anger and indicates a disposition to perceive various situations as annoying or frustrating with two subscales—Angry Temperament and Angry Reaction. The third and last scales are Anger Expression and Anger Control. These assess anger toward the environment and oneself according to four relatively independent subscales: Anger Expression-OUT, Anger Expression-IN, Anger Control-OUT, and Anger Control-IN. Alpha coefficients STAXI-2 were above 0.84 for all scales and subscales, except for Trait Anger Reaction, which had an alpha coefficient of 0.76 [Italian version by Spielberger (2004)].

STATISTICAL ANALYSIS

The responses on each questionnaire were scored according to their protocols, which resulted in one score per participant and a time point for each of the 22 scale/subscale questionnaires examined. Missing values (<2%) were imputed using the median. Descriptive statistics for all variables were analyzed and are summarized in **Table 1** and in the first panel (column) of **Figures 2**–**5**. Prior to conducting primary analyses, the distribution of scores on all the dependent variables was evaluated. Because the data were not normally distributed, we used non-parametric tests. Permutation tests are non-parametric tests as they do not rely on assumptions about the distribution of the data and can be used with different types of scales and with a small sample size.

The longitudinal effects of the program were analyzed to determine whether scores changed between the start, mid-point (5 months), and the end (9 months) of the course. To achieve this, we compared the main effect of the *program* on the *score*, considering *Time* as a unique factor with three levels: at the baseline (T0), at the pre of the mid-retreat (T1), and at the pre of the final retreat (T2). Here, we used a one-way permutation Repeated Measures Analysis of Variance (RM ANOVA) with the aovperm() function from the Permuco package v. 1.0.2 in R (Frossard and Renaud, 2018), which implements a method from Kherad-Pajouh and Renaud (2014). The difference between the traditional and the permutation ANOVA is that, while the traditional ANOVA tests the equality of the group mean, the permutation version tests the exchangeability of the group observations. In this study, the number of permutations was set to 100,000 and the alpha level was set to 0.05; therefore, the *p*-value was computed as the ratio between the number of permutation tests that have an *F* value higher than the critical *F* value and the number of permutations performed. Effect size estimates were calculated using partial eta squared. *Post hoc* testing used pairwise permutational *t*-tests with

TABLE 1 | Descriptive statistics of the depended variables among time points.

			Retreat 1				Retreat 2			
	T0 (Baseline)		T1 (Pre)		P1 (Post)		T2 (Pre)		P2 (Post)	
Variables	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
SWLS	20.14	6.52	21.24	7.18	21.52	7.71	22.62	7.63	22.97	8.27
PSS stress	20.21	3.73	18.21	3.41	18.17	3.68	19.24	2.73	18.31	3.86
STAI										
Y-1 state	34.24	11.66	35.48	7.42	30.28	7.33	37.21	8.70	32.10	8.03
Y-2 trait	45.76	11.76	45.14	10.33	44.59	11.87	42.55	10.88	41.79	11.14
PANAS										
Positive	33.76	5.85	33.00	5.54	33.41	5.53	34.07	5.81	34.14	5.64
Negative	23.45	8.10	21.03	6.56	21.31	8.35	20.51	6.77	19.83	7.56
FFMQ										
Observe	26.79	4.73	27.21	4.76	28.14	5.88	28.79	5.86	28.65	5.53
Describe	28.97	5.82	29.45	6.25	31	6.86	30.21	6.78	30.55	7.28
Act aware	24.65	6.12	24	6.64	24.07	6.38	26.07	5.39	26.07	6.28
Non-judge	27.14	7.49	29.21	7.48	29.41	8.37	30.45	6.77	30.38	7.68
Non-react	21.48	4.20	21.52	4.36	21.62	4.30	22.90	4.30	22.17	4.08
STAXI 2										
State anger	16.59	4.03	16.34	4.80	15.83	2.88	15.65	1.86	15.41	1.09
S-Ang/F	5.72	1.85	5.72	1.71	5.21	0.94	5.14	0.44	5.24	0.69
S-Ang/P	5.38	1.29	5.38	2.04	5.34	1.32	5.21	1.11	5.07	0.37
S-Ang/V	5.48	1.27	5.24	1.12	5.28	0.92	5.31	1.49	5.10	0.41
Trait anger	21.21	6.43	19.38	5.46	18.93	5.16	17.97	4.70	17.65	5.25
T-Ang/T	7.76	3.12	6.97	2.85	6.90	2.54	6.38	2.06	6.41	2.46
T-Ang/R	9.72	2.79	9.26	2.79	8.65	2.21	8.48	2.37	8.21	2.35
AX-O	15.69	3.81	15.03	3.97	14.51	3.63	14.35	3.76	14.21	3.94
AX-I	19.90	4.97	19.03	5.35	19.10	5.13	19.07	5.75	18.79	5.72
AC-O	22.90	2.58	23.52	3.13	23.55	3.75	23.65	3.37	24.82	3.25
AC-I	24.55	3.77	25.21	4.78	25.14	5.17	26.31	3.82	26.48	4.01

SWLS, Satisfaction with Life Scale; PSS, Perceived Stress Scale; STAI, State-Trait Anxiety Inventory; PANAS, Positive and Negative Affect Scale; FFMQ, Five Facet Mindfulness Questionnaire; STAXI 2, State Trait Anger Expression Inventory; S-Ang/F, Feeling Angry; S-Ang/V, Feel like Expressing Anger Verbally; S-Ang/P, Feel like Expressing Anger Physically; T-Ang/T, Angry Temperament; T-Ang/R, Angry Reaction; AX-O, Anger Expression-OUT; AX-I, Anger Expression-IN; AC-O, Anger Control-OUT; AC-I, Anger Control-IN.

the "pairwise.perm.t.test" function from the "RVAideMemoire" package in R (Hervé and Hervé, 2020). To account for Type I errors introduced by multiple pairwise tests and Type II errors introduced by small sample size, we applied the false discovery rate (FDR) correction method of Benjamini and Hochberg (1995) and set statistical significance at $p = 0.05$. Results are summarized in **Table 2** and in the third panel (column) of **Figures 2–5**.

The short-term effects of the contemplative program on each retreat were analyzed to determine whether scores changed post-retreats and whether these changes occurred in both retreats. Thus, we used a two-way permutation RM ANOVA, with the *score* of each scale/subscale as the dependent variable and the within-subject factors *Retreat* (1, 2) and *Condition* (Pre T1/T2, Post P1/P2) as independent variables. Results are summarized in **Table 3** and in the second panel (column) of **Figures 2–5**.

In addition, we explored differences attributed to the course and to the retreats using a paired permutation *t* test with the "perm.t.test()" function in R. We compare those psychological measures at the beginning of the course (T0) with its very end (P2), which coincided with the end of the second retreat. In this way, we illustrate a summary of changes due both to the second retreat and to the whole course. The results are summarized in **Table 4** and depicted in a radar plot in **Figure 6**.

RESULTS

Effects of the Program

Results from one-way permutation RM ANOVA showed a statistically significant effect of the program on SWLS at the $p = 0.008$ level over the *Time course* factor with a large effect size ($\eta p^2 = 0.16$). *Post hoc* analysis revealed that the SWLS score was significantly higher at T2 with respect to T2 (mean difference = 2.48; $p = 0.016$). Similarly, SWLS was higher T2 as compared to T1 (mean difference = 1.38; $p = 0.032$).

Results also provided statistically significant evidence of changes in the PSS over the *Time course* ($p = 0.009$), showing a large effect size ($\eta p^2 = 0.16$). *Post-hoc* results showed a difference between T0 and T1, revealing that the PSS was significantly lower at T1 (mean difference = −2, $p = 0.02$).

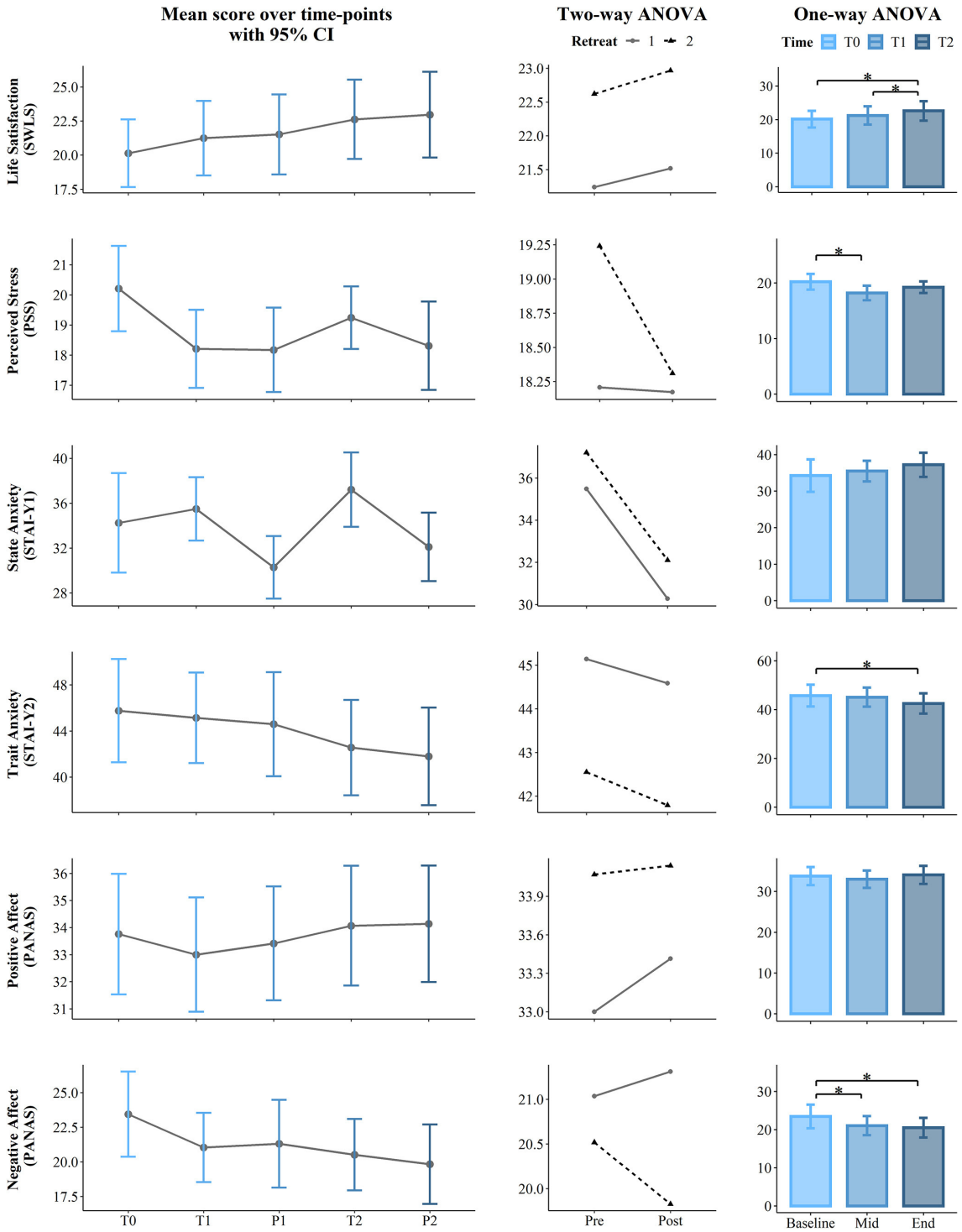

FIGURE 2 | Results of the Satisfaction with Life Scale (SWLS), Perceived Stress Scale (PSS), State and Trait Anxiety Index (STAI), and Positive and Negative Affect Scales (PANAS). The first (left) panel depicts pooled mean raw data per time point estimating 95% confidence interval. The second (central) panel represents changes in pooled mean (*y*-axis) between retreats. The solid line represents retreat 1 and the dotted line denotes retreat 2 derived from the contrasts of the two-way ANOVA. The third (right) panel depicts bar charts representing the changes in mean between the 3 time points derived from the one-way ANOVA. Note that scores are on the *y*-axis and time is on the *x*-axis. Time points legend: baseline (month 1—T0), pre (T1), post (P1), mid-course retreat (month 5—retreat 1), pre (T2), and post (R2) of the final retreat (month 9—retreat 2). Statistical significance, $^*p < 0.05$.

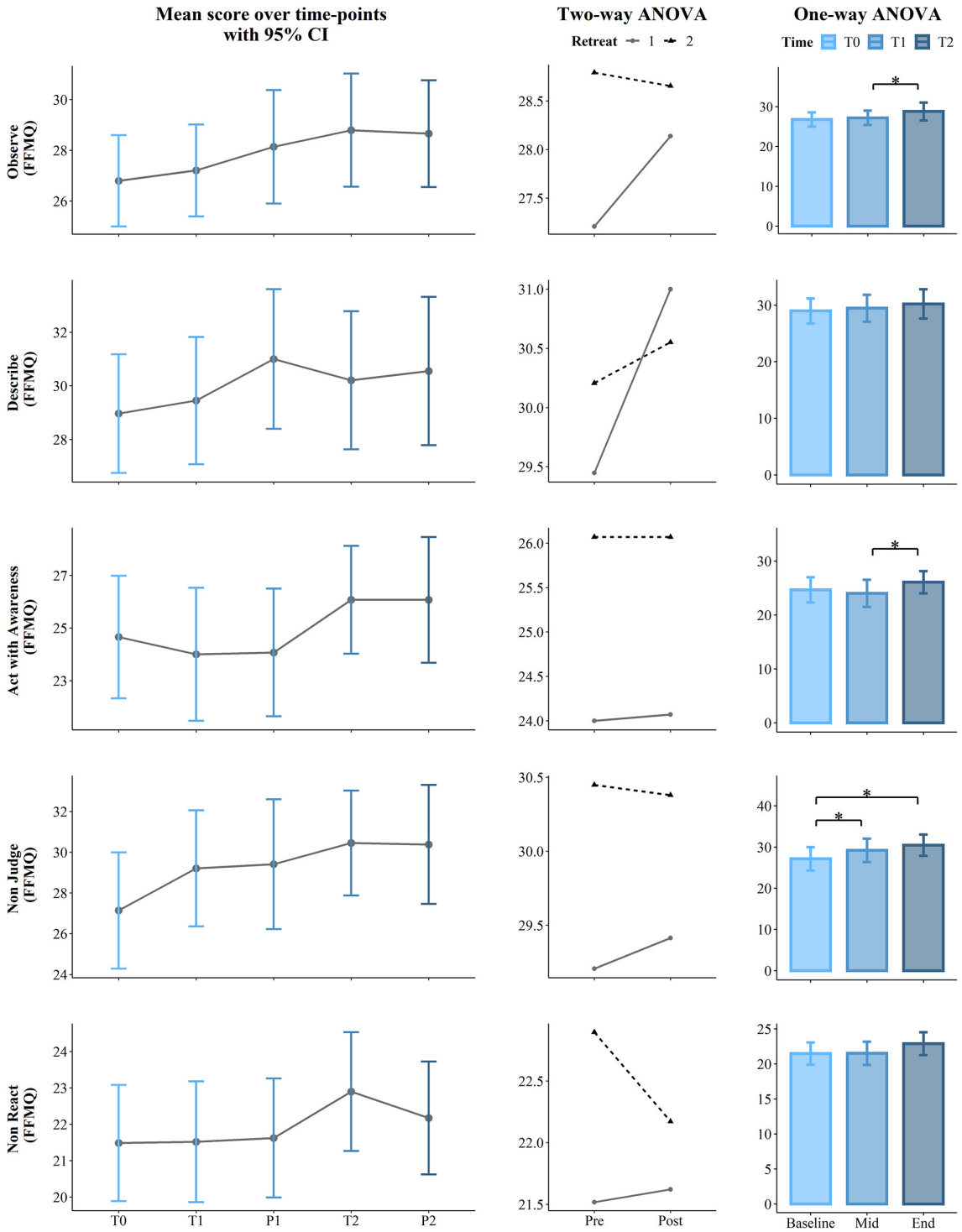

FIGURE 3 | Results for the Five Facet Mindfulness Questionnaire FFMQ (Observe, Describe, Act with Awareness, Non-judge, and Non-react). The first (left) panel depicts pooled mean raw data per time point estimating 95% confidence interval. The second (central) panel represents changes in pooled mean (*y*-axis) between retreats. The solid line represents retreat 1 and the dotted line denotes retreat 2 derived from the contrasts of the two-way ANOVA. The third (right) panel depicts bar charts representing the changes in mean between the 3 time points derived from one-way ANOVA. Note that scores are on the *y*-axis and time id on the *x*-axis. Time points legend: baseline (month 1—T0), pre (T1), post (P1), mid-course retreat (month 5—retreat 1), pre (T2), and post (P2) of the final retreat (month 9—retreat 2). Statistical significance, $^{*}p < 0.05$.

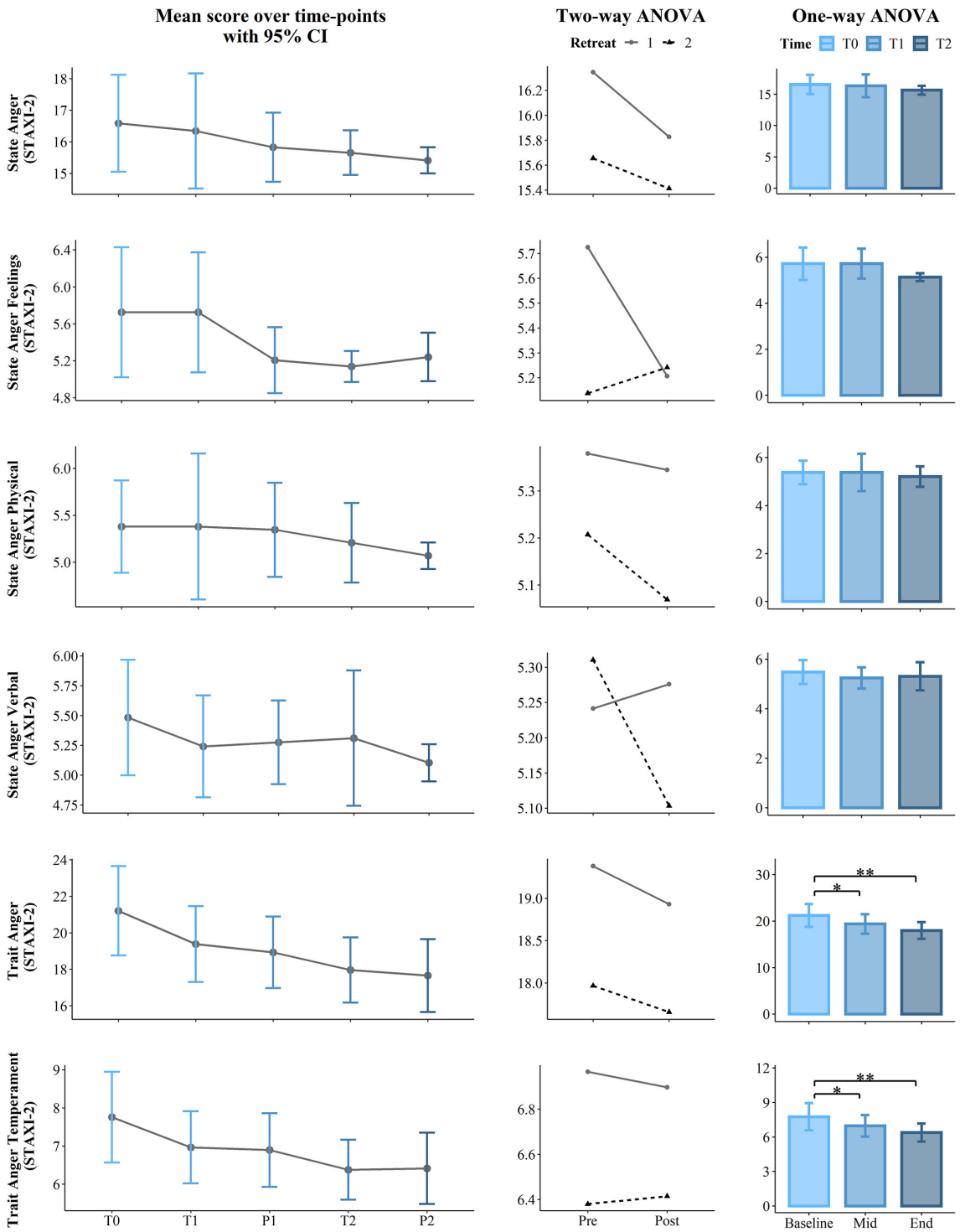

FIGURE 4 | Results of the first part of the State Trait Anger Expression Inventory (STAXI-2): State Anger, State Anger Feelings, State Anger Physical, State Anger Verbal, Trait Anger, and Trait Anger Temperament. The first (left) panel depicts pooled mean raw data per time point estimating 95% confidence interval. The second (central) panel represents changes in pooled mean (*y*-axis) between retreats. The solid line represents retreat 1 and the dotted line denotes retreat 2 derived from the contrasts of the two-way ANOVA. The third (right) panel depicts bar charts representing the changes in mean between the 3 time points derived from one-way ANOVA. Note that scores are on the *y*-axis and time is on the *x*-axis. Time points legend: baseline (month 1—T0), pre (T1), post (P1), mid-course retreat (month 5—retreat 1), pre (T2), and post (R2) of the final retreat (month 9—retreat 2). Statistical significance, $^{**}p < 0.01$ and $^{*}p < 0.05$.

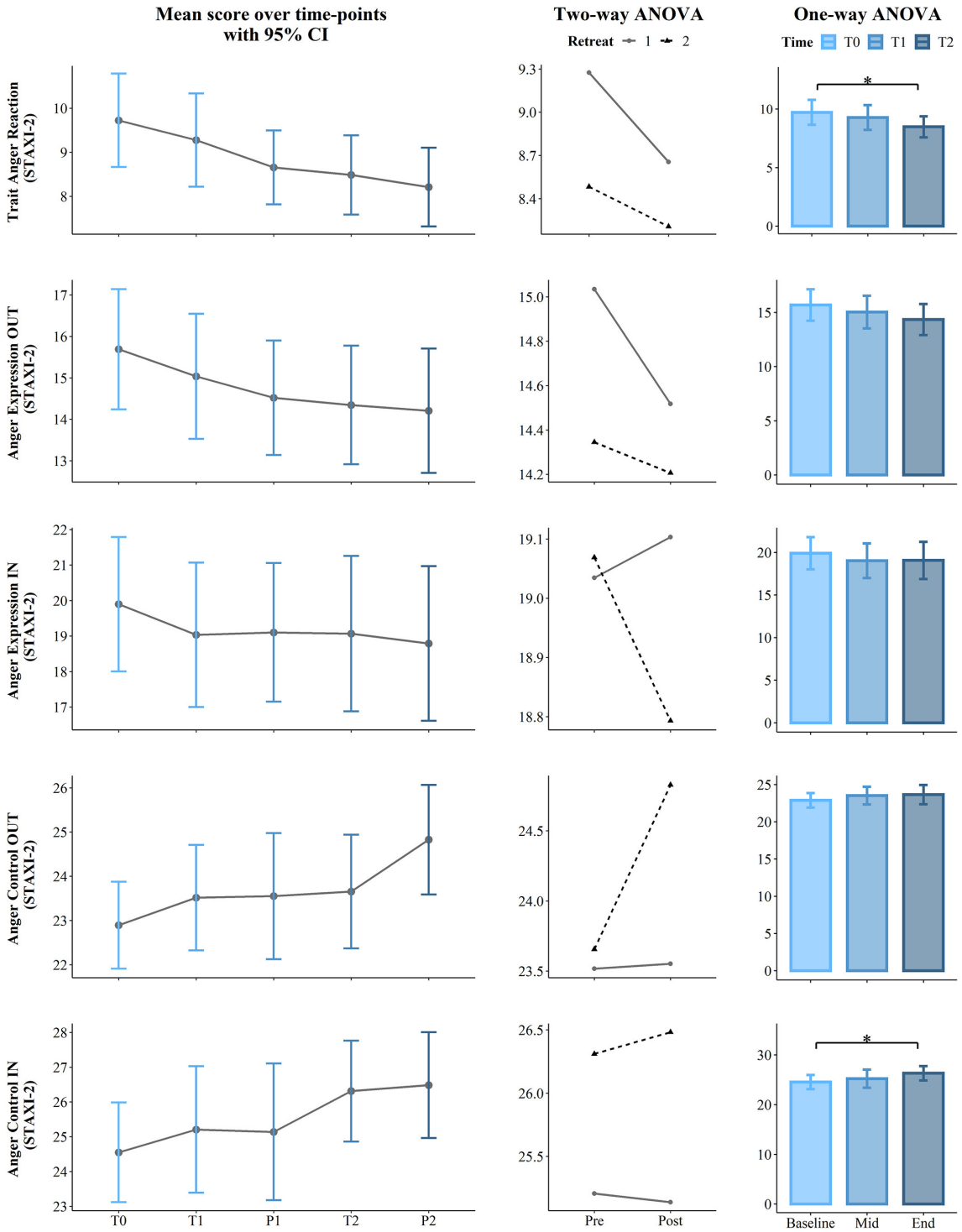

FIGURE 5 | Results from the second part of the State Trait Anger Expression Inventory (STAXI-2): Trait Anger Reaction, Anger Expression-IN, Anger Expression-OUT, Anger Control-IN, and Anger Control OUT. The first (left) panel depicts pooled mean raw data per time point estimating 95% confidence interval. The second (central) panel represents changes in pooled mean (*y*-axis) between retreats. The solid line represents retreat 1 and the dotted line denotes retreat 2 derived from the contrasts of the two-way ANOVA. The third (right) panel depicts bar charts representing the changes in mean between the 3 time points derived from one-way ANOVA. Note that scores are on the *y*-axis and time is on the *x*-axis. Time points legend: baseline (month 1—T0), pre (T1), post (P1), mid-course retreat (month 5—Retreat 1), pre (T2), and post (R2) of the final retreat (month 9—Retreat 2). Statistical significance, $^*p < 0.05$.

TABLE 2 | One-way ANOVA and pairwise comparison results with 100,000 permutations.

	One-way ANOVA			T0–T1		T1–T2		T0–T2	
	F	*P*	ηp^2	*M diff.*	*p*	*M diff.*	*p*	*M diff.*	*p*
SWLS	5.253	0.008**	0.16	1.1	0.217	1.38	0.032*	2.48	0.016*
PSS stress	5.182	0.009**	0.16	−2	0.02*	1.03	0.163	−0.97	0.163
STAI									
Y-1 state	1.381	0.263	0.05	1.24	0.494	1.73	0.491	2.97	0.424
Y-2 trait	5.204	0.009**	0.16	−0.26	0.458	−2.59	0.077	−3.21	0.025*
PANAS									
Positive	1.23	0.298	0.04	−0.76	0.487	1.07	0.324	0.31	0.711
Negative	6.222	0.004**	0.19	−2.42	0.021*	− 0.52	0.643	−2.92	0.012*
FFMQ									
Observe	4.034	0.023*	0.13	0.42	0.605	1.58	0.038*	2	0.054
Describe	1.389	0.258	0.05	0.48	0.52	0.76	0.493	1.24	0.493
Act aware	3.543	0.036*	0.12	−0.65	0.408	2.07	0.043*	1.42	0.153
Non-judge	6.86	0.002**	0.20	2.07	0.013*	1.24	0.196	3.31	0.013*
Non-react	3.358	0.043*	0.11	0.04	0.997	1.38	0.055	1.42	0.055
STAXI 2									
State anger	1.083	0.376	0.04	−0.25	0.783	−0.69	0.783	−0.94	0.456
S-Ang/F	2.289	0.096	0.08	0	1	−0.58	0.115	−0.58	0.238
S-Ang/P	0.415	0.77	0.01	0	1	−0.17	1	−0.17	1
S-Ang/V	0.364	0.733	0.01	−0.24	0.748	−0.07	0.748	−0.17	0.748
Trait anger	8.038	0.001***	0.23	−1.83	0.041*	−1.41	0.07	−3.24	0.002**
T-Ang/T	7.641	0.001***	0.22	−0.79	0.016*	−0.59	0.105	−1.38	0.008**
T-Ang/R	4.482	0.016*	0.14	−0.46	0.287	−0.78	0.131	−1.24	0.023*
AX-O	2.78	0.071	0.09	−0.66	0.325	−0.68	0.234	−1.34	0.118
AX-I	1.129	0.329	0.04	−0.87	0.475	0.04	1	−0.83	0.475
AC-O	1.077	0.349	0.03	−0.62	0.39	0.13	0.87	0.75	0.39
AC-I	3.735	0.03*	0.12	0.66	0.337	1.1	0.171	1.76	0.044*

*SWLS, Satisfaction with Life Scale; PSS, Perceived Stress Scale; STAI, State-Trait Anxiety Inventory; PANAS, Positive and Negative Affect Scale; FFMQ, Five Facet Mindfulness Questionnaire; STAXI 2, State Trait Anger Expression Inventory; S-Ang/F, Feeling Angry; S-Ang/V, Feel like Expressing Anger Verbally; S-Ang/P, Feel like Expressing Anger Physically; T-Ang/T, Angry Temperament; T-Ang/R, Angry reaction; AX-O, Anger Expression-OUT; AX-I, Anger Expression-IN; AC-O, Anger Control-OUT; AC-I, Anger Control-IN. Statistical significance: ***p < 0.001, **p < 0.01, *p < 0.05. Effect size follows the Cohen rules of thumb (Cohen, 2013) with 0.01 = small effect, 0.06 = medium effect, and 0.14 = large effect. M. diff = difference in means.*

Results revealed a significant effect of the *Time course* for Trait Anxiety ($p = 0.009$, $\eta p^2 = 0.16$). *Post-hoc* tests revealed a reduction in Trait Anxiety from the start of the course (T0) to the first day of the second retreat (T2) (M diff. $= -3.21$, $p = 0.25$).

Results also showed a significant effect of the *Time course* for negative affect ($p = 0.004$, $\eta p^2 = 0.19$). *Post hoc* analysis revealed that contemplative practice led to a reduction in negative affect from the baseline (T0) to the first day of the first retreat (T1) (mean difference $= -2.42$) and between T0 and first day of the second retreat (T2) (mean difference $= -2.92$), which differed significantly with $p = 0.021$ and $p = 0.012$, respectively.

Moreover, a significant effect of the *Time course* was found for several subscales of the FFMQ. First, the observe scale was found at the $p = 0.023$ level showing a large effect size ($\eta p^2 = 0.13$). *Post-hoc* comparisons revealed an increasing capacity to observe one's own thoughts, from the middle of the course (T1) to the first day of the second retreat (T2) (mean difference $= 1.58$, $p = 0.038$). Likewise, there was a significant difference for the capacity to Act with Awareness ($p = 0.036$, $\eta p^2 = 0.12$). *Post hoc* comparisons revealed an increased level at T2 as compared to T1 (mean difference $= 2.07$, $p = 0.043$). The *Time course* had a significant effect on the Non-Judge subscale with a large effect size ($p = 0.002$, $\eta p^2 = 0.20$). *Post hoc* analysis indicated a significant increase from T0 to T1 (mean difference $= 2.07$, $p = 0.013$), as well as from T0 to T2 (mean difference $= 3.31$, $p = 0.013$).

In regard to the STAXI-2, we found *Time course* significant effects on Trait Anger ($p = 0.001$, $\eta p^2 = 0.23$) and its subscales, Trait Anger Temperament ($p = 0.001$, $\eta p^2 = 0.22$) and Trait Anger Reaction ($p = 0.016$, $\eta p^2 = 0.14$). *Post-hoc* comparisons revealed a significance difference on the Trait Anger Scale, which decreased from the beginning of the course (T0) to 5 months later (T1) (mean difference $= -1.83$, $p = 0.041$) and also from T0 to the end of the course (T2) (mean difference $= -3.24$, $p = 0.002$). Similarly, State Anger Temperament significantly decreased from T0 to T1 (mean difference $= -0.79$, $p = 0.016$) and from T0 to T2 (mean difference $= -1.38$, $p = 0.008$). Additionally, Trait Anger Reaction decreased from T0 to T2 (mean difference $= -1.24$, $p =$

TABLE 3 | Results of the two-way permutation RM ANOVAs.

	Retreat (1–2)			Condition (Pre–Post)			Retreat*Condition		
Variables	***F***	***p***	***ηp²***	***F***	***p***	***ηp²***	***F***	***p***	***ηp²***
SWLS	10.701	0.002**	0.16	0.025	0.876	0	0.006	0.937	0
PSS stress	1.539	0.222	0.03	0.386	0.54	0.01	0.9	0.344	0.02
STAI									
Y-1 state	2.657	0.109	0.05	8.712	0.004**	0.14	0.002	0.963	0
Y-2 trait	12.526	0.001**	0.19	0.056	0.812	0	0.019	0.893	0
PANAS									
Positive	4.244	0.044*	0.07	0.03	0.866	0	0.157	0.693	0.00
Negative	2.423	0.125	0.04	0.014	0.908	0	0.565	0.456	0.01
FFMQ									
Observe	7.568	0.008**	0.12	0.077	0.782	0	1.955	0.167	0.035
Describe	0.11	0.74	0	0.31	0.578	0.01	1.664	0.204	0.03
Act aware	15.381	<0.001***	0.22	0	0.987	0	0.004	0.945	0
Non-judge	4.229	0.045*	0.07	0.001	0.97	0	0.066	0.794	0
Non-react	5.799	0.02*	0.10	0.087	0.769	0	1.065	0.308	0.02
STAXI 2									
State anger	1.451	0.268	0.03	0.743	0.459	0.03	0.091	0.808	0
S-Ang/F	1.954	0.182	0.03	1.168	0.326	0.04	2.473	0.12	0.04
S-Ang/P	2.918	0.101	0.05	0.251	0.652	0.01	0.155	0.726	0
S-Ang/V	0.075	0.8	0	0.388	0.563	0.01	0.407	0.55	0.01
Trait anger	7.605	0.008**	0.12	1.042	0.354	0.02	0.02	0.888	0
T-Ang/T	5.582	0.022*	0.09	0.066	0.857	0	0.052	0.822	0
T-Ang/R	5.748	0.019*	0.10	0.166	0.708	0	0.443	0.505	0.01
AX-O	1.672	0.199	0.03	0.088	0.77	0	0.241	0.627	0
AX-I	0.183	0.67	0	0.001	0.977	0	0.286	0.595	0.01
AC-O	2.342	0.131	0.04	0.583	0.447	0.01	1.517	0.224	0.03
AC-I	4.955	0.029*	0.08	0.121	0.728	0	0.048	0.829	0

*SWLS, Satisfaction with Life Scale; PSS, Perceived Stress Scale; STAI, State-Trait Anxiety Inventory; PANAS, Positive and Negative Affect Scale; FFMQ, Five Facet Mindfulness Questionnaire; STAXI 2, State Trait Anger Expression Inventory; S-Ang/F, Feeling Angry; S-Ang/V, Feel like Expressing Anger Verbally; S-Ang/P, Feel like Expressing Anger Physically; T-Ang/T, Angry Temperament; T-Ang/R, Angry reaction; AX-O, Anger Expression-OUT; AX-I, Anger Expression-IN; AC-O, Anger Control-OUT; AC-I, Anger Control-IN. Statistical significance: ***p < 0.001, **p < 0.01, *p < 0.05. Effect size follows the Cohen rules of thumb (Cohen, 2013) with 0.01 = small effect, 0.06 = medium effect, and 0.14 = large effect.*

0.023). Finally, the longitudinal effect of the course on the STAXI-2 led to significant results in the Anger Control-IN subscale over the *Time course* ($p = 0.03$, $\eta p^2 = 0.12$). Here, *post-hoc* comparisons showed a statistically significant difference between T0 and T2, which increased (mean difference = 1.76, p =.044). For more details, see **Table 2** and the third panel (column) of **Figures 2–5**.

Effects of the Retreats

Two-way permutation RM ANOVAs showed a significant main effect for *Retreat* on SWLS ($p = 0.002$, $\eta p^2 = 0.16$), Trait Anxiety ($p = 0.001$, $\eta p^2 = 0.19$), positive affect ($p = 0.044$, $\eta p^2 = 0.07$), Observe ($p = 0.008$, $\eta p^2 = 0.12$), Act with awareness ($p \leq 0.001$, $\eta p^2 = 0.22$), Non-Judge ($p = 0.045$, $\eta p^2 = .07$), Non-React ($p = 0.02$, $\eta p^2 = 0.10$), Trait Anger ($p = 0.008$, $\eta p^2 = 0.12$), Trait Anger Temperament ($p = 0.022$, $\eta p^2 = 0.09$), Trait Anger Reaction ($p = 0.019$, $\eta p^2 = 0.10$), and Anger Control-IN ($p = 0.029$, $\eta p^2 = 0.08$). A main effect of the *Condition* (Pre vs. Post) was found only for the State Anxiety scale with $p = 0.004$ and a large effect size ($\eta p^2 = 0.14$). Analysis results including *F* statistics are summarized in **Table 3**; a visual representation of the data is presented in the second panel (column) of **Figures 2–5**.

Overall Effects of the Course and Retreats

As predicted, permutation *t*-test analysis revealed that participants increased their reported level of SWLS from the start (T0) to the end (P2) of the course (mean difference = 2.83, $p = 0.008$). Two subscales from the FFMQ, namely, the capacity to observe one's own thoughts (mean difference = 1.86, $p = 0.039$) and non-judgmental attitude toward the inner experience (mean difference = 3.24, $p = 0.006$), also significantly increased from the start to the end of the course. On the other hand, the affect linked to the progression from the start (T0) to the very end of the course (P2) was related to a significant decrease in the negative affect (mean difference = −3.62, $p = 0.001$). In the same way, the average level of stress of the sample decreased significantly (mean difference = −1.9, $p = 0.033$) along with a significant decrease of Trait Anxiety (M diff = −3.97, $p \leq 0.001$). Participants also decreased on almost all STAXI-2 subscales. Here, the results from permutation

TABLE 4 | Overall changes between the start (T0) and the end of the course (P2).

Variables	*T*	*M diff.*	*P*
SWLS	2.797	2.83	0.008**
PSS stress	−2.299	−1.9	0.033*
STAI			
Y-1 State	−0.99	−2.14	0.338
Y-2 trait	−4.003	−3.97	<0.001***
PANAS			
Positive affect	0.462	0.38	0.687
Negative affect	−3.859	−3.62	0.001***
FFMQ			
Observe	2.204	1.86	0.039*
Describe	1.769	1.59	0.095
Act aware	1.752	1.41	0.101
Non-judge	3.02	3.24	0.006**
Non-react	1.182	0.69	0.272
STAXI 2			
State anger	−1.756	−1.17	0.111
S-Ang/F	−1.49	−0.48	0.204
S-Ang/P	−1.558	−0.31	0.249
S-Ang/V	−1.692	−0.38	0.187
Trait anger	−4.614	−3.55	<0.001***
T-Ang/T	−4.027	−1.34	<0.001***
T-Ang/R	−3.927	−1.52	<0.001***
AX-O	−1.851	−1.48	0.08
AX-I	−1.437	−1.1	0.175
AC-O	2.861	1.93	0.009**
AC-I	2.555	1.93	0.017*

*SWLS, Satisfaction with Life Scale; PSS, Perceived Stress Scale; STAI, State-Trait Anxiety Inventory; PANAS, Positive and Negative Affect Scale; FFMQ, Five Facet Mindfulness Questionnaire; STAXI 2, State Trait Anger Expression Inventory; S-Ang/F, Feeling Angry; S-Ang/V, Feel like Expressing Anger Verbally; S-Ang/P, Feel like Expressing Anger Physically; T-Ang/T, Angry Temperament; T-Ang/R, Angry reaction; AX-O, Anger Expression-OUT; AX-I, Anger Expression-IN; AC-O, Anger Control-OUT; AC-I, Anger Control-IN. Statistical significance: ***p < 0.001, **p < 0.01, *p < 0.05. Effect size follows the Cohen rules of thumb (Cohen, 2013) with 0.01 = small effect, 0.06 = medium effect, and 0.14 = large effect. M. diff = difference in means.*

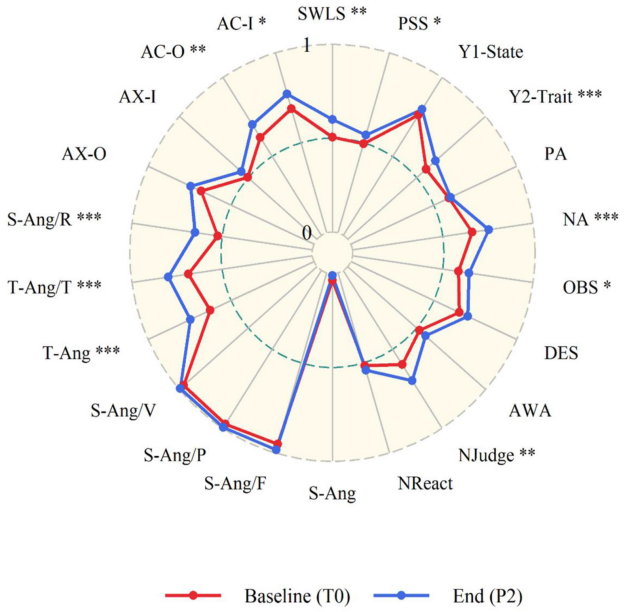

FIGURE 6 | Results of the permutation *t*-test between the start and the end of the course. All values ranged from 0 to 1. Variables: SWLS, Satisfaction with Life Scale; S-Ang/F, Feeling Angry; S-Ang/V, Feel like Expressing Anger Verbally; S-Ang/P, Feel like Expressing Anger Physically; T-Ang/T, Angry Temperament; T-Ang/R, Angry reaction; AX-O, Anger Expression-OUT; AX-I, Anger Expression-IN; AC-O, Anger Control-OUT; AC-I, Anger Control-IN; PSS, Perceived Stress Scale; STAI-Y1, State-Trait Anxiety Inventory—State; STAI-Y2, State-Trait Anxiety Inventory—Trait; PA and NA, Positive and Negative Affect Scales, respectively; OBS, Observe; DES, Describe; AWA, Act with awareness, Njudge, Non-judge; NReact, Non-react. To make consistent that an increase of the specific scale corresponds to an improvement in well-being, negative scales were reversed, namely: PSS, STAI-Y1, STAI-Y2, PANAS-NA, S-Ang, S-Ang/F, S-Ang/P, S-Ang/V, T-Ang, T-Ang/T, S-Ang/R, AX-O, AX-I. Concerning the statistical significance, ***$p < 0.001$, **$p < 0.01$, and * $p < 0.05$.

paired *t*-test reveal a significant difference in scores, which decreased from T0 to P2 on all the subscales of Trait Anger (mean difference = −3.55, $p \leq 0.001$; Trait Anger Temperament: mean difference = −1.34, $p \leq 0.001$; Trait Anger Reaction: mean difference = −1.52, $p \leq 0.001$), with an increased value for the subscales Anger Control-OUT (mean difference = 1.93, $p \leq 0.009$) and Anger Control-IN (mean difference = 1.93, $p = 0.017$). For more details, see **Table 4** and **Figure 6**.

DISCUSSION

The aim of this study was to examine the effectiveness of an integrated 9-month mental training program called *The Art of Happiness*, which was developed to increase well-being in a general population. By a range of well-established psychometric assessment tools, we quantified how several psychological well-being variables changed with course attendance. We took into account both the trait effects of the course acting at a long timescale (over the 9-month duration of the full course) and the state effects of intensive retreat experiences acting at a short time scale (over the course of each of the two retreats). Several psychological well-being measures related to states and—more importantly—traits gradually improved as participants progressed from the beginning to the end of the course.

On the one hand, the program produced a significant longitudinal effect (9 months) revealing a progressive increase in the volunteer's levels of life satisfaction and of the capacities to reach non-judgmental mental states, to act with awareness, to non-react to inner experience, and to exercise control over attention to the internal state of anger, in line with other contemplative interventions (Fredrickson et al., 2008; Keng et al., 2011; Baer et al., 2012; Kong et al., 2014). Conversely, after the completion of the program, there were decreases in levels of trait anxiety, trait anger (including both the anger temperament and reaction subscales), and negative affect, showing a progressive reduction during the intervention. These results support prior research that demonstrated the longitudinal positive effects of

a multitude of contemplative practices on well-being measures linked to—among others—decreased trait anxiety, trait anger, and negative affect (Fix and Fix, 2013; Khoury et al., 2015; Gotink et al., 2016). Such findings highlight the gradual development of mental states related to subjective well-being in parallel with ongoing contemplative practices over a time scale of months, with a gradual increase of wholesome mental states, and a gradual decrease of unwholesome mental states. Notably, as in other mindfulness interventions (Khoury et al., 2015; Gotink et al., 2016), there was a significant reduction in the level of perceived stress already in the first few months of the program (T0–T1).

Additionally, these results show the specific effects between retreat experiences within the program as an intervention for fostering happiness. Specifically, the retreats had a positive effect on the participants' perceived well-being, which improved between the two retreats (with a 4-month interval). Among other assessed dimensions, between the retreats, there were significantly increased levels of life satisfaction, positive affect, and mindful abilities to act with awareness, to observe, non-react, and non-judge inner experience and the capacity to control anger toward oneself. Conversely, there were significantly lower levels of trait anxiety and trait anger (including both the anger temperament and reaction subscales) between the retreats (over a period of 4 months).

Regarding the very short effects of the course, we highlight significant changes within the first part of the training and prior to the first retreat (T0–T1). Here, some variables related to happiness changed most, suggesting their independence from retreat. Particularly, PSS notably decreased along with negative affect and Trait Anger (the subscale of Angry Temperament), while the capacity of non-judgmental attitude toward the inner experience significantly increased, providing useful information for future interventions.

Moreover, participants' state anxiety significantly decreased in a very short time (5 days), between pre and post of both retreats. These findings are consistent with previous studies, which demonstrated the positive effects of contemplative training and practices on these measures in retreats (Khoury et al., 2017; Howarth et al., 2019; McClintock et al., 2019). In **Figure 6**, we make a general and integrated comparison between the various psychological measures, comparing the very beginning of the course with its very end, which also coincided with the end of the second retreat. In this way, we illustrate both state changes (due to the second retreat) and trait changes (due to the whole course). This representation allows an integrated view of all the changes that took place at different time scales. This graph might suggest that the only measures that did not change significantly from the beginning to the end of the course are those in which the participants already had a score strongly oriented toward well-being, and therefore with little room for a change. Thus, future studies could take into account individual differences when evaluating happiness programs.

Although the present findings are promising, this study presents several limitations that need to be taken into consideration. The two main limitations rely on the absence of a randomized control group and in the fact that participants were self-selected. This lack of verification makes it difficult to determine whether the results are attributable to the program or to other factors, for example, simply arising due to spending time in a happiness-oriented activity. It is also important to note that despite examining several assessments within persons, the sample size was restricted to 29. Furthermore, responses to the questionnaires may have been biased toward the socially desirable response as the course's staff administered them, and another active group could have controlled for these effects. Consequently, it is recommended to conduct future studies with larger samples and a well-designed and controlled trial, in order to achieve more conclusive findings. Another limitation is that, while all the participants attended the whole course with a comparable (coherent) level of commitment to the practices (including the retreats), we did not verify their course-related activity and practices at home, and therefore, we have no way to check whether they actually did the practice activities at home as suggested during the modules.

Possible new directions of exploration of this study concern the age range of the participants, which, in our case, was limited to middle-aged individuals (39–66), and therefore, the effects on younger or older individuals remain currently unexplored. Another interesting direction would be to conduct follow-up measurements to assess the stability of the longitudinal effects months or years after the end of the program. Finally, while well-being and happiness are individual and subjective narratives of one's life as good and happy (Bauer et al., 2008), and therefore self-assessments through questionnaires are a valid and common tool of investigation, in interventions such as *The Art of Happiness*, it would be appropriate to also explore individual differences, more objective psychophysiological effects, as well as cultural and social aspects influencing the inner model of happiness.

Despite these methodological limitations and still unexplored directions of research, the results described here suggest that *The Art of Happiness* may be a promising program for fostering well-being in individuals, improving mental health and psychological functioning. Longitudinal integrated contemplative programs with retreats offer a unique opportunity for the intensive development of the inner attitudes related to the capacity to be happy, reducing mental health symptoms and improving a more stable eudemonic well-being in healthy adults.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author, Nicola De Pisapia, upon reasonable request.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Ethics Committee of the Sapienza University of Rome. The participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

ND, CM, and AR designed the study. ND, CM, LC, and AR collected the data. CR analyzed the data. CR and ND wrote the original draft. All authors edited and reviewed the manuscript.

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SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpsyg.2021.600982/full#supplementary-material

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SUPPLEMENTARY INFORMATION

The Art of Happiness: an explorative study of a contemplative program for subjective well-being

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The Art of Happiness: General program of activities

The Art of Happiness was an intensive nine-month contemplative program for voluntary participants with little or no experience in meditation. The program consisted of seven modules (the first module was five days in length, the others two days in length, usually over weekends from Friday evening through Sunday) and two retreats (an intermediate retreat lasting six days and a final retreat lasting five days). Modules and retreats took place roughly on a monthly basis and in the following order: modules 1 to 4, followed by the intermediate retreat, then modules 5 to 7, followed by the final retreat. In this way, the entire program lasted approximately nine months.

The general types of activities of each module were as follows:

Presentations of core course subject matter: Lectures with slides on the specific topics of each individual module presented by a Buddhist teacher from the Tibetan tradition. During these presentations, participants could intervene and ask questions for clarification. The length of each presentation could vary between 30 and 60 minutes depending on the specific topic and the questions.

Scientific presentations: Lectures with slides presented by a cognitive neuroscientist. During these presentations, participants could intervene and ask questions for clarification. The length of each scientific presentation could vary between 50 and 75 minutes depending on the specific topic and the questions.

Contemplative practices: Various types of contemplative activities, ranging from individual reflections, a contemplative art activity, guided meditations on relevant topics, basic focused and awareness meditations of various types. All meditations were derived from the Buddhist contemplative traditions, both Mahayana and Theravadin.

Various individual or group activities, including:

- *Mindful Dialogue in pairs*: Participants were divided randomly into pairs. Each person shared with their partner for a total of about five minutes each on a specific topic or question indicated by the teacher using the skills of mindful speaking and mindful listening. The structure of the discussion was not a conversation *per se*. The "speaking" participant was asked to speak thoughtfully, attentively and with deliberation; the "listening" participant was asked to listen mindfully, without interrupting or intervening, without judgment, with total openness and acceptance.
- *Small group or Plenary group sharing/discussions:* Everyone was free to ask questions of the instructors or to share thoughts or experiences. Small group sharing activities focused on a specific question or questions. Plenary group discussions were often more open.

Practice activities at home: The teachers gave a series of indications on activities or exercises that the participants could carry out at home between one module and another.

Course materials

The main bibliographic source accompanying the program was the book *The Art of Happiness* by the Dalai Lama and Howard Cutler. This book served as the content basis for the course. As such, the inner structure of the course, the subject matter covered, the order of topics presented, and so forth, followed the structure of this root text (see the following outline of the course content for the relevant readings from this book associated with each individual module).

To supplement the main presentations of the core course subject matter, relevant TED (and other) videos of talks by a variety of experts in the fields of science, psychology, contemplative practices, sociology and other disciplines were regularly used to expand the discussion topics and offered a variety of points of view on the subject of focus. In addition, numerous citations, extracts, and poetry from both Western and Eastern philosophical and spiritual traditions were shared during the sessions. All slides and audio-recordings of all the lectures, as well as the audio-recordings of the guided meditations, were made available to the participants at the end of each module.

Intermediate and final retreats

The intermediate and final retreats of this course served as opportunities for participants to deepen their understanding and inner experience of the course content. During each retreat, the preceding modules had a full day dedicated to that module's subject matter. In other words, the intermediate retreat occurred after the completion of modules 1 through 4, and thus, the first full day of retreat was dedicated to module 1, the second day to module 2, and so forth. The final retreat occurred after the completion of modules 5 through 7 and was organized similarly.

Each day dedicated to a module was then organized in the following way:

- Mornings: Practice of total silence from time of awakening until after lunch. Beginning the day with motivation meditation, followed by a series of guided meditations on topics and contemplative methods relevant to the day's module, exploring more deeply the subject matter and its application to daily life.
- Afternoons: Beginning with a specific topic of individual reflection pertaining to the application of the subject matter to a particular aspect of life, followed by small-group work on that topic, sharing and diving deeper into one's personal experience through discussion with 2-4 other course participants. The small-group work was followed by a plenary session in which each small group presents any insights or particularly impactful contents that arose in their group. The afternoon then ended with a final concluding meditation to allow the day's understandings to settle and stabilize in the minds of the participants.

In addition to the above, during the final retreat, participants were also divided into small groups in order to create a final presentation to the whole group of their experience of the course in whatever form they choose: theatre, songs, small films, poetry or other creative formats.

Here is a detailed list of all the specific activities and topics for each module and retreat.

MODULE 1

Topic: The purpose of life and authentic happiness (*The Art of Happiness,* chaps. 1–4)

- LECTURES AND PRESENTATIONS
    - **Presentations of core course subject matter:**
        1. The purpose of life and authentic happiness. Definitions of happiness; why happiness matters; the benefits of happiness; what happiness is not; differences between happiness and pleasure; happiness and selfishness; the habit of happiness.
        2. The sources of happiness. Where does our happiness come from.
        3. The positive states of mind: joy, patience, enthusiasm, gratitude, compassion, openness, hope, kindness, tenderness, equanimity, love, generosity, honesty, courage.
        4. Meditation as a tool for training the mind, as a process of familiarization with the inner causes of well-being. Primary components of meditation: steady attention and mindfulness. Types of meditation: focused meditation and analytical meditation. Constructive meditations and deconstructive meditations.
        5. Introduction to the power of awareness of our motivations. The role of motivation in life and in well-being and unhappiness. The power of cultivating healthy motivations in life.
        6. The relationship between ethical attitudes and actions and personal well-being. Ethics as an inner attitude upon which outer actions depend.
    - **Scientific presentations:**
        1. Mental capital and well-being. The human nervous system. Anatomy of the central and peripheral system. Neuroscience and psychology. Brain plasticity.
        2. The psychology and neuroscience of happiness. The mechanisms of pleasure and the brain circuits of reward. The neurotransmitters of happiness: dopamine, serotonin, oxytocin and endorphins. Positive psychology: basic ideas and limits. Effects of positive and negative emotions on cognition. Flow as an optimal experience. Can happiness be learned?
        3. Neuroscience and meditation. Mind wandering: negative and positive aspects. The brain networks of mental wandering. The default-mode network. Definition of mindfulness. The practice of mindfulness in the Western world. A neurocognitive model of the practice of

breathing meditation. Psychophysiological effects of focused meditation. Effects of mindfulness on the brain and behavior. What is introspection. Analytical Meditation and Compassion Meditation.

- CONTEMPLATIVE PRACTICES
  - **Individual reflections**
    1. Our starting point: What exactly do I think happiness is?
    2. Initial exploration of motivation: Why am I here? What brought me to participate in this course? What would I like to receive from this course?
    3. What is my happiness made up of? What conditions, what factors, what elements? (preliminary contemplation before creating a personal mind map of "My Happiness".)
    4. Three questions within the context of maximizing one's own well-being: (1) What aspects of myself and my life bring me real satisfaction and well-being? (2) What qualities or characteristics of myself that contribute to my happiness would I like to strengthen/reinforce? (3) What characteristics of myself that diminish my well-being would I like to transform or eliminate?
  - **Basic Meditations** *(3-4 short sessions distributed during each day of the course)*
    1. Sustained mindful attention on various objects: the breath, bodily sensations, thoughts, sounds
    2. Centering and grounding meditations
- INDIVIDUAL OR GROUP ACTIVITIES
  - **Mindful dialogue/mindful listening (pairs)**
    1. What is true happiness?
    2. Where does my happiness come from?
  - **Plenary group discussions**
    1. What is true happiness? (Sharing from the Mindful dialogue activity)
    2. Open Q+A sessions (3)
  - **Contemplative art activity**
    1. Drawing a mind map of "My Happiness".
- PRACTICE ACTIVITIES AT HOME
  - **Daily practices:**
    1. At the end of each day, find three positive things that happened (that one did or experienced, or that others did) during the day, contemplating the contributing circumstances, causes and conditions. Generating appreciation and gratitude.
    2. Cultivating a positive motivation at the start of each day through inner reflection.
    3. Daily diary of personal reflections.

<u>MODULE 2</u>

Topic: Empathy and compassion (*The Art of Happiness,* chaps. 5–7)

- LECTURES AND PRESENTATIONS
  - **Presentations of core course subject matter:**
    1. Defining empathy and kindness. Defining compassion as an inner attitude. The differences between empathy and compassion. The components of compassion. The benefits of compassion. Emerging compassion and active compassion. Differentiating genuine compassion and false compassion. What is and is not compassion.
    2. The obstacles to compassion: indifference, distraction, pride, hatred, selfishness, discrimination.
    3. The development and practice of compassion: inner methods (meditations) and behavioral methods (casual daily acts of kindness, reflections). The triad of compassion + wisdom + ability/skillful means. Compassion in action, compassion rooted in wisdom; the ability to help or not; maintaining a compassionate attitude even when we are impotent and cannot help.
  - **Scientific presentations:**
    1. Empathy in psychology and neuroscience. When empathy is born in the history of life. Empathy and parental attachment. The role of the recognition of emotions. Basic emotions. The role of the amygdala. Facial expressions and the role of the muscles of the eye

orbits. The theory of simulation. Sociopathy. Contagion of mental states. Taking the cognitive perspective of others. The theory of mind. Autism.
    2. Neuroscience and compassion. Differences between emotional empathy and compassion. Brain plasticity and compassion. Psycho-neuro-endocrinological effects of compassion.
- CONTEMPLATIVE PRACTICES
    - **Individual reflections**
        1. Continuing exploration of motivation: Observing actual motivations at work. Transforming present motivations by applying broader, more altruistic perspectives.
        2. Cultivating positive motivation at the start of the day.
        3. Individual reflection on moments of genuine compassion or false compassion in one's own life experiences.
        4. Reflecting on moments in life when there was someone who needed our help. How did we help? Did we use wisdom? Compassion? Skill?
    - **Basic Meditations** *(2-3 short sessions distributed during each day of the course preparatory to guided meditations or other activities)*
        1. Sustained mindful attention on various objects: the breath, bodily sensations, thoughts, sounds
        2. Centering and grounding meditations
    - **Guided Meditations**
        1. Cultivating compassion
        2. The kindness of others
- INDIVIDUAL OR GROUP ACTIVITIES
    - **Small group sharing**
        1. Our starting point: What is compassion, why do we need compassion, what the world would be like without compassion, what our individual life would be like without compassion.
        2. Where does my happiness come from?
    - **Plenary group discussions**
        1. What is true happiness? (Sharing from the Mindful dialogue activity)
        2. Open Q+A sessions (2)
    - **Mindful dialogue/mindful listening (pairs)**
        1. "I find it hard to be compassionate when ...."
- PRACTICE ACTIVITIES AT HOME
    - **Daily practices:**
        1. Consciously do at least one gratuitous act of kindness each day.
        2. Cultivating a positive motivation at the start of each day through inner reflection.
        3. Cultivate a short daily meditation practice (self-awareness, self-care, grounding, centering, sustained attention)
        4. If desired, continue the daily practice of Three Positive Things.
        5. Daily diary of personal reflections.

<u>MODULE 3</u>

Topic: Transforming life's suffering (*The Art of Happiness,* chaps. 8–11)

- LECTURES AND PRESENTATIONS
    - **Presentations of core course subject matter:**
        1. Recognizing suffering. Manifestations of suffering: birth, old age, illness, death, separation, uncertainty, dissatisfaction.
        2. Changing perspective on suffering. Courage, openness, equanimity, knowledge, intelligence, wisdom, compassion.
        3. Methods for how to change perspective. Benefits of changing how we relate with our problems.
    - **Scientific presentations:**
        1. When does suffering start in a human being? The function of crying in babies. Physical suffering and psychological suffering. Social exclusion. The importance of pain. Nociceptive system. Congenital insensitivity to pain. Addiction. Positive and negative reinforcements. Association learning. Dopamine and rewards. Hedonic dysregulation and mechanisms of

pleasure. The placebo effect: experimental evidence and fields of application in the control of pain.
2. Emotional regulation. How to transform emotions. Intervention strategies in emotional regulation. The distancing and the change of perspective, Meditation and pain. Meditative practices for addictions.

- CONTEMPLATIVE PRACTICES
  - **Individual reflections**
    1. Continuing exploration of motivation: Observing actual motivations at work. Transforming present motivations by applying broader, more altruistic perspectives.
    2. Cultivating a positive motivation for the day.
    3. Contemplating the presence of uncertainty and dissatisfaction in life.
    4. Reflecting on a specific problem in life with different eyes. Practicing changing perspective.
  - **Basic Meditations** *(2-3 short sessions distributed during each day of the course preparatory to guided meditations or other activities)*
    1. Sustained mindful attention on various objects: the breath, bodily sensations, thoughts, sounds
    2. Centering and grounding meditations
  - **Guided Meditations**
    1. Forgiving ourselves.
    2. Taking on the suffering of self and others and giving relief (Tong-len)
- INDIVIDUAL OR GROUP ACTIVITIES
  - **Plenary group discussions**
    1. Open Q+A sessions (3)
  - **Mindful dialogue/mindful listening (pairs)**
    1. Our starting point: How do you react when you have problems in your life?
- PRACTICE ACTIVITIES AT HOME
  - **Daily practices:**
    1. Cultivating a positive motivation at the start of each day through inner reflection. Consciously cultivate each day a gentle, open, friendly and kind attitude toward oneself and others.
    2. Cultivate a short daily meditation practice (self-awareness, self-care, grounding, centering, sustained attention)
    3. If desired, continue the daily practice of Three Positive Things; and/or the practice of One Kind Action.
    4. Daily diary of personal reflections.

MODULE 4

Topic: Working with the disturbing emotions: Anger and hatred (*The Art of Happiness,* chaps. 12–13)

- LECTURES AND PRESENTATIONS
  - **Presentations of core course subject matter:**
    1. The disturbing emotions. The three poisons: ignorance, aversion and attachment. The mental afflictions associated with aversion. What arises from aversion: impatience, irritation, frustration, disdain, fury, resentment, intolerance, malevolence, resentment, envy. The mechanisms of reactivity. Anger, definition and its effects. Effects of anger on decisions.
    2. Can mental afflictions be eliminated? Reasons to be able to say yes. Antidotes to anger: awareness, patience, courage, change of perspective, love. The origin of patience and love. Inner states following the practice of mental training.
  - **Scientific presentations:**
    1. Anger and the brain. Psychological definition of anger. Causes of anger. Amygdala and anger. The stress reaction. Sympathetic and parasympathetic nervous system. Health consequences of anger attacks. Hunger and anger. Serotonin. Psychological pathologies associated with anger.
    2. Intervention on anger. The neurocognitive model of anger and points of intervention. Management of anger and neuroplasticity. Breaking the automatic responses to anger. The power of distraction. Angry rumination. Social outbursts of anger. Exercise and anger. The power of reframing and the change of perspective. Prefrontal cortex, imagination, serotonin in relation to patience.

- CONTEMPLATIVE PRACTICES
    - **Individual reflections**
        1. Deepening contemplation of motivation and cultivating wholesome motivations in life; at the start of each day.
        2. Exploring our inner reactivity; reflecting on specific experiences of anger, deconstructing moments of anger.
        3. Deconstructing a moment when another person has made us angry.
    - **Basic Meditations** *(***As in previous modules:** *2-3 short sessions distributed during each day of the course preparatory to guided meditations or other activities)*
    - **Guided Meditations**
        1. Exploring the angry mind.
        2. The harmful effects of anger.
        3. Is it possible to reduce or even eliminate the anger in my mind? Is it worthwhile to do so? Why or why not?
        4. Forgiving oneself, forgiving the other.
- INDIVIDUAL OR GROUP ACTIVITIES
    - **Small group sharing**
        1. Our starting point: How do anger and hatred manifest in your life? What effect do they have? Do you think this is a problem, or not?
    - **Plenary group discussions**
        1. Open Q+A sessions (3)
    - **Mindful dialogue/mindful listening (pairs)**
        1. "The harmful results of anger that I have directly experienced are..."
- PRACTICE ACTIVITIES AT HOME
    - **Daily practices:**
        1. Consciously cultivate each day a gentle, open, friendly and kind attitude toward oneself and others.
        2. Cultivate a positive motivation at the start of each day through inner reflection.
        3. Cultivate a short daily meditation practice (self-awareness, self-care, grounding, centering, sustained attention)
        4. If desired, continue the daily practice of Three Positive Things; and/or the practice of One Kind Action.
        5. Daily diary of personal reflections.

<u>INTERMEDIATE RETREAT</u>

Day 1: Module 1 – The purpose of life and authentic happiness

- MEDITATIONS
    1. Reflecting on motivation; cultivating wholesome motivation for the day
    2. Reflecting on the nature and importance of genuine happiness in life.
    3. Reflecting on the difference between pleasure (hedonistic happiness) and happiness (eudaimonia) and the significance of these distinctions.
    4. Reflection: All living beings wish for happiness and wish to avoid suffering. Is this true? What are the deeper consequences of this statement?
- AFTERNOON TOPIC FOR REFLECTION AND DISCUSSION
    1. Bring to mind specific personal experiences of both hedonistic pleasure and eudemonistic happiness, of the benefits or damage created on such occasions to both self and others. Comparing these experiences and clarifying their distinctions. Exploring the ramifications of these differences to one's own personal growth as a human being, one's own well-being, etc.

Day 2: Module 2 – Empathy and compassion

- MEDITATIONS
    1. Focusing the mind; centering and grounding; focusing on the breath.
    2. Reflecting on motivation; cultivating wholesome motivation for the day
    3. Equanimity
    4. Loving kindness
- AFTERNOON TOPIC FOR REFLECTION AND DISCUSSION

1. Reflecting on the differences between empathy and compassion. Bringing to mind specific personal experiences of empathy without compassion, compared with experiences of the presence of compassion. Feeling the differences in these experiences. Analyzing and exploring those differences and the various causes and conditions giving rise to either empathy, or compassion, or both. Reflecting on one's behavior and reactions in each instance.

Day 3: Module 3 – Transforming life's suffering

- MEDITATIONS
    1. Focusing the mind; centering and grounding; focusing on the breath.
    2. Reflecting on motivation; cultivating wholesome motivation for the day
    3. Opening to the uncomfortable and painful with Yes
    4. The practice of self-compassion, opening to one's own pain and discomfort with kindness
    5. Taking on the suffering of self and others and giving relief (Tong-len)
- AFTERNOON TOPICS FOR REFLECTION AND DISCUSSION (first in pairs, then in triads)
    1. (Pairs) Reflecting on and sharing with a partner one or more personal painful experiences and occasions in which one was able or not able to reframe the moment, change perspective and transform the experience into something more useful and less harmful. Reflecting on what one can learn/gain from the painful and difficult experiences in life. What inner abilities or qualities do we develop thanks to the difficulties we experience in life and overcome?
    2. (Triads) Bring to mind a personal experience of being able to meet with fortitude and balance a moment of pain or suffering in life, transforming the experience into an important and worthwhile challenge in your life's path. Reflect on the experience; deconstruct and analyze what happened, what were the inner and outer causes and conditions that contributed to the experience evolving in that way. What did you learn? What did you feel?

Day 4: Module 4 – Working with the disturbing emotions: Anger and hatred

- MEDITATIONS
    1. Focusing the mind; centering and grounding; focusing on the breath.
    2. Reflecting on motivation; cultivating wholesome motivation for the day
    3. Reframing a specific situation to alleviate anger
    4. Forgiveness
    5. Taking on the suffering of anger and hatred of self and others and giving relief (Tong-len)
- INDIVIDUAL CONTEMPLATIVE ACTIVITY
    1. Starting with a calm reflective meditation on a specific situation/person toward which one is experiencing anger. Then, writing a letter to that person, the object of one's anger, explaining one's own feelings, experiences, and how one would prefer to feel and what kind of situation would be preferable, taking responsibility for one's own feelings and perceptions, being as totally honest about one's own personal view of the situation.

       Again, a calming meditation, finding one's own inner state of balance and letting go of the above emotions. Then, writing a letter to oneself as if one is the other person, putting oneself in the shoes of the other person and responding to the first letter written above, responding as honestly and openly as possible, seeking to feel from the side of the other person as much as possible. A final centering meditation, letting go of any emotions generated. In the resulting inner space, reflect upon what one has learned or experienced in this exercise and what lessons one wishes to keep close in the heart and apply in life.
- AFTERNOON TOPIC FOR REFLECTION AND DISCUSSION
    1. Bringing to mind a situation in which one was able to NOT get angry with someone in a conflictual situation but instead was able to maintain inner calm, take a broader perspective, place oneself in the position of the other and not allow anger to take over. Deconstruct and analyze that situation. What made it possible? What causes and conditions contributed? How did the situation conclude? What important or meaningful things did one learn from the experience that one wishes to hold onto and apply in life?

<u>MODULE 5</u>

Topic: Working with the disturbing emotions: The image of self (*The Art of Happiness,* chap. 14)

- LECTURES AND PRESENTATIONS
    - **Presentations of core course subject matter:**

1. The different images that we hold of ourselves: the person we are when we are all alone, the person that we present to the world. The concept of "I" as a reified thought in the mind that has limited reality. The "person" as an ever-changing flow, not fixed, always in flux. The suffering of clinging to a reified image of oneself and ignoring/remaining ignorant of one's constant changing "self".
2. Ignorance, one of the 3 basic causes of suffering, as rooted in this basic mistaken view of self. The natural but limited view of being at the center of the world. Self-centeredness as inhibiting a recognition of our fundamental interconnectedness, interdependence, and therefore as a basis for ongoing suffering.
3. The conclusions and interpretations that we reach based on that reified image of self and their consequences: over-estimation and under-estimation; self-criticism and self-hatred. The inner critic; our inner monologue regarding ourselves and the world. Creating a false world through description and interpretation; how this brings suffering and difficulties. Antidotes to these false views through contemplating impermanence and change; equanimity and acceptance; forgiveness; self-care and loving kindness; letting go; reframing; "It's not all about me".

- **Scientific presentations:**
  1. Mythological origin of individual identity. When is the "I" born in the history of life and in individuals. Self-awareness. Difference between the concepts of (self)-awareness, selfhood, me and person. Cognitive psychology of the self.
  2. Properties of the self-image: perspective, unity, coherence, independence, identity. Construction of these properties and their deconstruction. Is the self an illusion for neuroscience? Person and hypocrisy. Self-promotion. Autonomy of the self. The brain networks of the self. Hypo-egoic phenomena. The transcendence of oneself.

- CONTEMPLATIVE PRACTICES
  - **Individual reflections**
    1. Deepening contemplation of motivation and cultivating wholesome motivations in life; at the start of each day.
    2. Our starting point: Individually reflect on three points: Describe the person (yourself) you present to the world. Describe the person (yourself) that you do not present to the world. Describe the differences between these two.
    3. Reflecting on what aspects of yourself are you afraid to reveal to others. What aspects of yourself are you afraid to recognize and embrace. What are your fears and vulnerabilities.
  - **Basic Meditations** *(***As in previous modules:** *2-3 short sessions distributed during each day of the course preparatory to guided meditations or other activities)*
  - **Guided Meditations**
    1. Forgiving oneself.
    2. Self-compassion.
- INDIVIDUAL OR GROUP ACTIVITIES
  - **Plenary group discussions**
    1. Open Q+A sessions (3)
- PRACTICE ACTIVITIES AT HOME
  - **Daily practices:** *As listed in Module 4. No new at-home practices for this module.*

<u>MODULE 6</u>

Topic: Life and death (*The Art of Happiness,* no specific corresponding chapter)

- LECTURES AND PRESENTATIONS
  - **Presentations of core course subject matter:**
    1. The value of reflecting on and cultivating a constant awareness of death. Awareness of death as a friend in cultivating our best human qualities, in giving the deepest meaning to our human lives. Overcoming the fear of death through knowledge and understanding.
    2. The certainty of death. The story of Kisagotami. How the sense of death can help to appreciate the value of life. The importance of inner resources to face death. The moment of death can come at any time. There is no guaranteed lifespan; we can die at any time. Every moment as a moment of death and a moment of rebirth. The pervasiveness of impermanence: all things change; all things die. Finding beauty in impermanence.

- **Scientific presentations:**
    1. Consciousness from the scientific point of view. A reductionist approach to consciousness. Easy and hard problems of consciousness. What is subjectivity? Towards a scientific theory of consciousness. Theories based on information processing. Has science become panpsychist? Elements of Integrated Information Theory. Consciousness in waking, in sleep and in death. Studies of Near Death Experience, medical and psychological research.

- CONTEMPLATIVE PRACTICES
    - **Individual reflections**
        1. Deepening contemplation of motivation and cultivating wholesome motivations in life; at the start of each day.
        2. Our starting point: Do you think about your death from time to time? What kind of thoughts do you have? How do you view death? How do you feel when you think about death?
        3. Reflect on the hour just passed as if it were the last hour of your life. You realize that you are dead and ask yourself: Are you satisfied with how you lived the last hour of your life?
        4. Reflection: When you reach the moment of death and look back on your life, what kind of life do you want to have lived? What kind of person do you want to be when you reach the end of this life? Every action now creates that person or takes us away from that person. Remembering that we will die and that we are constantly creating ourselves helps us to be more self-aware and to make wiser, more thoughtful decisions.
    - **Basic Meditations** *(***As in previous modules:** *2-3 short sessions distributed during each day of the course preparatory to guided meditations or other activities)*
    - **Guided Meditations**
        1. Imagining experiencing the death process (according to the Tibetan Buddhist tradition).
- INDIVIDUAL OR GROUP ACTIVITIES
    - **Plenary group discussions**
        1. Open Q+A sessions (3)
- PRACTICE ACTIVITIES AT HOME
    - **Daily practices:** *As listed in Module 4. No new at-home practices for this module.*

<u>Module 7</u>

Topic: Cultivating the spiritual dimension of life: A meaningful life (*The Art of Happiness,* chap. 15)

- LECTURES AND PRESENTATIONS
    - **Presentations of core course subject matter:**
        1. The importance of understanding the potential of human beings. Recognition of the importance of inner change. What we need to live a meaningful life. Ethics, concentration and wisdom. The six perfections: morality, generosity, patience, joyful effort, concentration, and wisdom. The archetype of the hero. Can we too be heroic in order to find meaning in life?
    - **Scientific presentations:**
        1. The scientific study of wisdom. Intelligence, creativity and wisdom in psychological research. Wisdom in Western Philosophy. The four cardinal virtues and the three theological virtues in the history of Western thought. The Berlin model of wisdom. How to measure wisdom. Ideas for a brain model of wisdom. Wisdom and age.
- CONTEMPLATIVE PRACTICES
    - **Individual reflections**
        1. Deepening contemplation of motivation and cultivating wholesome motivations in life; at the start of each day.
        2. Our starting point: What is a meaningful life for you? Is a meaningful life the same as a spiritual life?
    - **Basic Meditations** *(***As in previous modules:** *2-3 short sessions distributed during each day of the course preparatory to guided meditations or other activities)*
    - **Guided Meditations**
        1. Meditation on the potential and value of this precious human life.
        2. How to cultivate joy.
- INDIVIDUAL OR GROUP ACTIVITIES
    - **Small group sharing**

1. Our starting point: What is a meaningful life for you? Is a meaningful life the same as a spiritual life?
    - **Plenary group discussions (more open discussion time in this last module)**
        1. Open Q+A sessions (4)
- PRACTICE ACTIVITIES AT HOME
    - **Daily practices:** *As listed in Module 4. No new at-home practices for this module.*

FINAL RETREAT

Day 1: Module 5 – Working with the disturbing emotions: The image of self

- MEDITATIONS
    1. Focusing the mind; centering and grounding; focusing on the breath.
    2. Reflecting on motivation; cultivating wholesome motivation for the day
    3. The impermanence of oneself
    4. What does it mean to ***truly*** take care of oneself?
    5. Self-compassion
- AFTERNOON TOPIC FOR REFLECTION AND DISCUSSION
    1. How can we truly see ourselves moment by moment, accept ourselves moment by moment, and take care of ourselves moment by moment throughout life?

Day 2: Module 6 – Life and death

- MEDITATIONS
    1. Focusing the mind; centering and grounding; focusing on the breath.
    2. Reflecting on motivation; cultivating wholesome motivation for the day
    3. The impermanence of oneself: Dying in every moment
    4. The uncertainty of when death will claim us: The freedom of a constant awareness of death
    5. Self-compassion
- AFTERNOON TOPIC FOR REFLECTION AND DISCUSSION
    1. You have one month to live. What now has the most importance? What do you wish to protect, to preserve? What loses importance or priority? What will you let go of?

Day 3: Module 7 – Cultivating the spiritual dimension of life: A meaningful life

- MEDITATIONS
    1. Focusing the mind; centering and grounding; focusing on the breath.
    2. Reflecting on motivation; cultivating wholesome motivation for the day and for my life
    3. How we are all interconnected; recognizing the kindness of others; gratitude
    4. How letting go of self brings greater life satisfaction
- AFTERNOON TOPIC FOR REFLECTION AND DISCUSSION
    1. What am I taking away from my experience of this course? What things do I wish to continue to work on? How do I think to apply and live what I have learned in these last months? How do these things relate to making my life meaningful?